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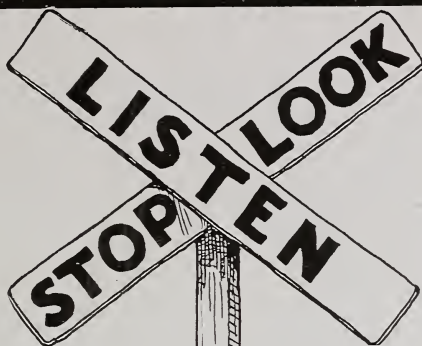
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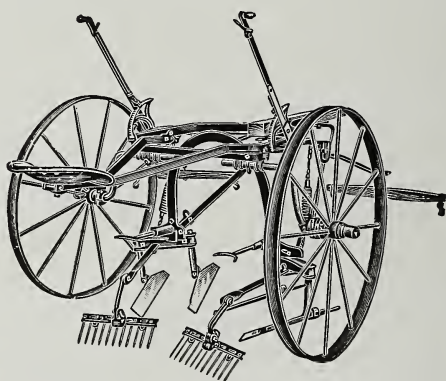


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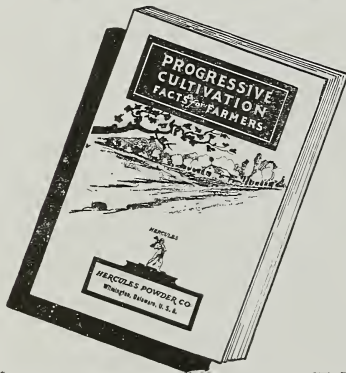
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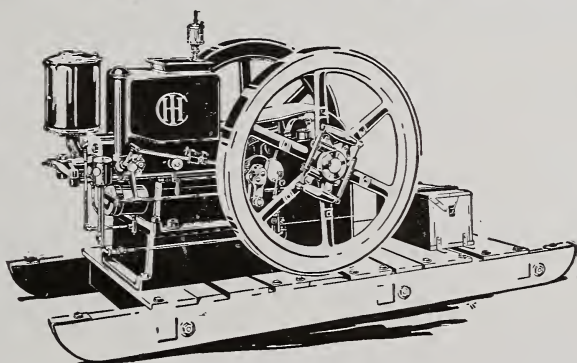
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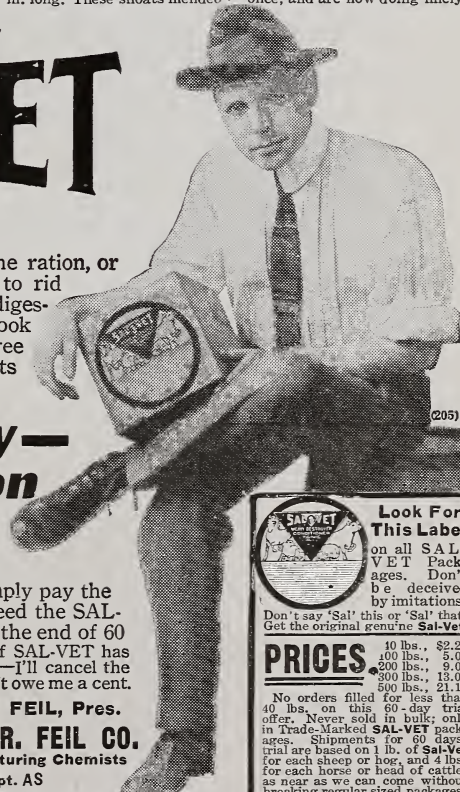


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THE UNIVERSITY SPRING.

THE AGRICULTURAL STUDENT

Vol. XXI.

OHIO STATE UNIVERSITY, COLUMBUS, JUNE, 1915

No. 10

A RETROSPECTION OF THE COLLEGE OF AGRICULTURE

V. C. SMITH, Secretary

THE most successful period in the history of the agricultural college not only from the standpoint of attendance, number of students graduated and enlargement in a material way, but also because of the extended scope of activities, is that of the past year.

The semester opened in September with an enrollment slightly less than that in the same month in 1913, due to the fact that the first year of the two-year course in agriculture was discontinued. The number of four-year students more than equalled the number enrolled a year ago. The total number registering in the different courses was as follows: agriculture, 601, horticulture 101, forestry 45, home economics 234, entomology 5. In addition to these there were 64 students who registered for the second year of the two-year course which was being given for the last time.

On October 19 the enrollment was increased by 156, at which time the students of the three-year short courses in agriculture and horticulture registered. The three-year short courses are but a revision of the two-year courses. In the past there seems to have been a common feeling that the requirements for admission to the four-year courses were too high, the character of the work too difficult, and the length of the school year prohibitive for the country boy who in many cases must be on the farm earlier in

the spring and later in the fall than the regular college year will permit. Hence the three-year short courses have been designed.

It is estimated that if we have the same number registering in the freshman class each year when all three years of the work are being given, the courses probably will have from 400 to 500 students. It is sincerely hoped that this will not detract from the four-year courses for the short courses are in no wise substitutes or equivalents of the longer ones, and should be taken only by students who cannot find it possible to take one of the longer courses of study.

On January 4 the campus was invaded by nearly 200 young men and women who came to attend the various winter courses. Seventy of the eighty-eight counties of Ohio were represented. Naturally, Franklin county led in attendance, having thirteen students, but was closely followed by Cuyahoga which sent ten. The attendance, however, was not confined to our own state. The records show that there were students in attendance from Iowa, Indiana, Pennsylvania, Virginia, West Virginia, Washington, D. C., and one student from Mexico.

The opening of February was made conspicuous by Farmers' Week. This course though quite young has proved its worth and has come to stay. That its popularity is growing is evidenced by the increased yearly attendance.

The first Farmers' Week was held in January 1913, at which time 154 were in attendance. In February 1914 the number increased to 770, while Farmers' Week this year had a registered enrollment of 1457. As registration was optional, there were doubtless many in attendance whose names were not recorded. The attractions this year covered a wide range of subjects and included speakers from various states.

In addition to the above, one week known as Institute Normal was set aside for the benefit of speakers who were to address the Farmers' Institutes during the winter. Attendance at the Normal was compulsory with all such lecturers. Efforts were made at this time by the college faculty to instruct these 100 men in all the recent developments and discoveries in the agricultural world as well as the most scientific and modern methods of conducting farming operations.

It might, therefore, be said that the college of agriculture offered instruction on the campus, during the last year, to 3,034 people.

However, it must not be thought that the activities of the college ended here, for through its extension department, it has served far more people away from the college than it did on the campus. Since last June 44 extension schools have been held, providing instruction for approximately 7,000 men, women and children. Three thousand and fourteen farmers were in attendance at fertilizer, pruning and spraying demonstrations. Stock judging contests were conducted in which 5,160 boys participated. Many cooking demonstrations were carried on, as well as practical instruction given in sewing, housekeeping, and other lines of home economics. In addition

other organizations were served, such as farmers' fall festivals, women's clubs, community and church meetings, high schools, farmers' institutes Grange meetings, corn shows, county normal schools, fair exhibits, and various meetings throughout the state.

In short, the extension department of the college provided practical instruction for approximately 28,000 people. If we add to this list the number receiving instruction on the campus through the various college courses Farmers' Week and Institute Normal we find that the college of agriculture has served directly 31,000 people and many thousands indirectly, through the 373,000 bulletins issued, aside from practical information given to the press.

During the year the college has thrived in a material way. Two new buildings were completed and occupied for the first time at the beginning of the school year. The new Botany and Zoology building is built of mottled red brick and is located west of Neil Avenue, just opposite Oxley Hall. Directly south of Townshend Hall is located the new Horticultural and Forestry building, which by some is called the twin of Townshend Hall since the two buildings are identical in outside appearance, both as to architecture and kind of material used. However, the interior arrangement, structure and finish is quite different, in that the new building is most conveniently and fully equipped and arranged. At the rear of this building several rows of greenhouses of the most modern design are being constructed. The new building with greenhouse facilities, provides a very comfortable home for two departments that have long been cramped for space, and has greatly improved facilities for teaching.

The size of the university farm has also increased by the purchase of the Hansberger and Beit farms that lie west of the present university holdings. The two farms contained together 132 acres and were obtained for the consideration of \$56,000. Both farms have clay soils and will afford opportunity for experimentation on a soil more nearly like the soil of other parts of the state. The university now owns 582 acres and in addition has 105 acres under lease.

special direction at the beginning of the second year. The college now offers four-year courses in agriculture, pomology and vegetable gardening, landscape architecture, floriculture, entomology, forestry and home economics; also three-year short courses in agriculture and horticulture and winter courses in agriculture, dairying, and poultry husbandry.

In recent years the demand for correspondence courses has been growing until the time seems ripe for their es-



TOWNSHEND HALL.

With the new Horticultural Building and greenhouses completed, greater facilities are afforded for branching out in the courses offered, consequently, three new courses have been adopted which will go into effect next fall. A four-year course in pomology and vegetable gardening will replace the present four-year course in horticulture; a four-year course in floriculture and a four-year course in landscape architecture are entirely new. The first year in all three courses is practically identical, but each tends in its

establishment. Hence, the correspondence courses are being prepared by various members of the faculty and will probably be offered to the public by the first of September. All the work connected with these courses will be under the direction of the extension department. When the correspondence courses are in effect, the Ohio college of agriculture will be one of the few state institutions offering such instruction.

The one factor more than any other which is producing a co-operative spirit

with the various colleges of Ohio and the college of agriculture is the combination arts-agriculture courses. This is an arrangement whereby a student may attend another college for three years, taking certain prescribed work, then transfer to the college of agriculture for one year, during which time he will carry technical agricultural studies. The agricultural work will be given full credit by the institution first attended, which will grant him the arts degree at the end of the first year spent at the college of agriculture. The student attends the college of agriculture a second year, in which time he completes the requirements for the degree of Bachelor of Science in agriculture. Thus, in five years a student may secure two degrees, the arts degree from the first college attended and the agricultural degree from Ohio State University. This plan was first submitted last year and to date, combination courses have been effected with ten colleges in addition to a similar arrangement with the Arts College at Ohio State. The colleges having such an agreement are Akron, Antioch, Ashland, Baldwin-Wallace, Bluffton, Cedarville, Defiance, Muskingum and Wilmington and Capital University. Besides these there are at the present time several colleges negotiating for such an arrangement. It is only a matter of a short time until combination courses will be given with every college in the state.

A new system of scholarships has been devised which replaces the system of awarding one scholarship by each county through its county agricultural

society. Under the present arrangement two classes of scholarships are maintained. The one may be used only by students in the three-year short courses and the other in the four-year courses. The three-year scholarships are given as prizes, one in each county, to the boy or girl winning in the junior contest work of that county in which there are the greatest number of entries. Their scholarships cover the registration expenses for the three years of the course. The four-year scholarship is secured by competitive examination. There are 20 of these given each year, and they cover the registration expenses during the entire four-years of the course. The state is divided into four sections and five scholarships are available annually to each section. On the second Friday of April a competitive examination is held throughout the state in all the first and second grade high schools. The examinations are on agricultural subjects and may be taken only by students in the graduating classes of the high schools. These scholarships are drawing the attention of all Ohio high school students to Ohio State University.

The graduating class of the college this year will be the largest in its history. Last year's class contained 165 graduates—the largest to that date—but the class of 1915 will total approximately 200. Assuming there will be no fatalities during the last final examination period the number of graduates will be as follows: agriculture 108, horticulture 17, forestry 8, home economics 55, entomology 3, arts-agriculture 2, arts-home economics 2.

THE GROWTH OF THE HORTICULTURE AND FORESTRY DEPARTMENTS

PROF. W. R. LAZENBY

THE departments of horticulture and forestry have been working units in the university for many years. From humble beginnings they have grown and prospered until today they assume a place of esteemed importance in our college of agriculture.

The horticulture department was first organized in connection with the

pendent, determined, imaginative, young men, but soon I was proud of them and I have been proud of them ever since.

They were W. J. Green of Ohio, W. B. Alwood of Virginia, and W. S. Devol of California; each of whom has made an impress upon the horticulture of his adopted state.



THE NEW HORTICULTURE AND FORESTRY BUILDING.

department of botany more than a third of a century ago. The oldest of human arts was not in royal favor then, either as a means or an end in education. In the whole catalog of human pursuits, not one was so dreaded and despised by the average college man. In the fall of 1881 when courses of instruction in horticulture were first offered, three students presented themselves. It was a small group of inde-

The younger department, that of forestry, has had much the same history. Its numbers were small at first, for in this country forestry is the youngest of the great productive arts. But in time forestry too stood alone as a separate department and the number of students has rapidly increased.

Those whose acquaintance with the various departments of our college of agriculture is confined to more recent

years can scarcely realize the struggle of their early life. One knows little of the prejudice to be overcome, the signal lack of sympathy, and the still greater lack of resources. In those early years the young university because it emphasized the sciences, and taught agriculture and the mechanic arts was bitterly attacked from every side. It was called a "Godless institution planted in a cornfield," or as one denominational journal expressed it, "a school where hayseeds and greasy mechanics were taught to hoe turnips, pitch manure, and be dry nurses to steam engines." Yet we were not discouraged. During all this time the one never-failing source of inspiration for all was Dr. Norton S. Townshend, a man of foresight, one of nature's noblemen, and one of the fathers of agricultural education.

The relation of the art or technique of horticulture and forestry to the sciences and to a general or preliminary education always reminds me of a wheel. The hub, which is the real foundation of the structure, may well represent a public school education; the spokes radiating from the hub represent the sciences—botany, geology, entomology, chemistry, physics, economics, meteorology, etc. Coming last we have the felly and tire, which while depending upon the spokes, binds them together and makes a serviceable wheel. This part represents the application and technique of horticulture, forestry,

and similar arts. As all the parts named are essential to a good working wheel, so a general preparatory education, a grounding in the principles of science, and a good technical training, are just as essential to a well rounded course in horticulture or forestry.

Planned in this way our course rests on a broad and secure foundation. Moreover, when we are fortunate enough to find along with this teachers of enthusiasm and precision, we have the elements of an inspiring and efficient education.

These departments will surely prosper because they are good working units in the university. These departments exemplify the fact that there is no antagonism between the old education and the new, pure science and applied science, between the humanities and distinctly technical subjects. The older historical subjects will probably always remain central in a great university, but departments that represent the primary and applied will constantly be added and grouped around them; and this is well, for these departments keep us near the people.

If we analyze a great and impressive landscape we find the fundamental principles are unity and variety. These express the highest attributes of a university—unity in aim—which is the education and training of men and women; unity also in the ideals of teaching; but infinite variety in the means by which these ideals are to be realized.



IN THE CORN ROWS

THE IDLER

IT was three long years since the June day when he had sat in the crowded gymnasium, one of hundreds of black-gowned seniors, listening to the words of the commencement speaker, and then advancing in the long line of his self-conscious classmates to receive at the hands of the President that white.

at the gray and red brick buildings, the smooth oval of Ohio Field the vivid green of elms and sycamores that bordered the Olentangy.

He was in his own cornfield and it was a hot July day. He smelled the dusty soil that rose from beneath his horse's feet, and the sharp banners of



"O come, let's sing Ohio's praise,
And songs to Alma Mater raise;"

ribbon-bound roll which symbolized to him the achievement of four years of pretty conscientious work. He had thought that he would come back often to the campus, that unlike all the others he would never let the bond connecting him with his Alma Mater loosen or break. But the business of life had had its way with him, and here it was three years already since the goodbys were said and he had looked his last

the corn struck him in the face as he went up and down the rows. Sweat rolled out from under his big straw hat and the sun seemed almost too hot to endure. Up at the end of the field he knew that there was a jug of cool water in the grass beneath a walnut tree; so when presently he reached the end of the row, he let the tired horse stand in the shade while he lifted the jug and took a long drink. Then he

sat down for a rest in the long grass, his head against the tree.

The breeze cooled his face, the grass was soft, and he shut his eyes. He heard the horse stamping under the bites of the flies, and there was a turtle-dove cooing some place,—it sounded miles off. Then—what was that faint sound drifting across the fields? Bells? Surely not. Yet again it came, far off, but clear, softly chiming, mellow, an old tune. Words began to shape themselves dimly in his mind:—

O come, let's sing Ohio's praise,

And songs to Alma Mater raise;

While our hearts rebounding thrill—

How persuasive and alluring the music of those distant bells was, how it brought back to him the old days, when he had sat on a spring Sunday afternoon beneath the big elm over near the tennis courts, listening as the music floated across the green stretches of

the campus! He must surely go back, he thought, as the chimes kept on sounding—he must see the old place once more.

Suddenly the horse shook himself violently, the harness jingled sharply, and he sat up straight in the grass and looked around him. There were no bells,—it was not even time for the farm-bell to call him to the house. Had he dreamed of the chimes, of the far-off college and the old friends? Perhaps. At any rate, the spell was wrought. And now, as once more he lifted the plow for the return down the long row, he knew that the years had made no real difference, that the call of the old associations was still strong and true; and though the sun beat down on his back, though the sweat streaked his dusty face, he was happy and contented in his own thoughts.



THE FOURTH ANNUAL OHIO STATE HORSE SHOW

C. M. BAKER, '16

WHEN two thousand people turn down automobile races, baseball games and athletic meets to witness the beauties of equine symmetry, it's a sure sign that the interest in the pleasure horse is not waning. Such was shown to be the case in the fourth annual horse show which was staged by the Saddle and Sirloin Club in the uni-

In the judgment of horsemen, the big event of the show was the five-gaited saddle class in which ten answered the call of the bugle. After a superb exhibition of horsemanship and performance, the contest narrowed to The Manager, a chestnut gelding, showing distinctive style, and Silver King, a new horse in



THE LINEUP OF FIVE-GAITED SADDLERS.

versity hollow, Saturday afternoon, May 15.

With a total of 109 entries and 62 horses listed the show this year was the finest of its kind ever held at the university and probably in this part of the state. J. L. Edmonds of the University of Illinois acted as judge assisted by Miss Ruth Casparis and William Neil in the ladies' riding contest, while Adjutant General B. H. Hough passed on the entrants in the military mounts.

Columbus riding circles, recently brought from Missouri by Frank E. Powell. Several times the judge sent the horses over the turf, but the ease and the snap of Silver King won for him the blue ribbon. The first prize for this event was a fine bridle and saddle donated by J. C. Campbell of Columbus. In the combination class, however, The Manager proved superior standing over Silver King in the final showing.

Connoisseur, with Don Robbins up, was placed over the chestnut mare, Killarney, with Frank Tallmadge's mare, Fantana, third, in the three-gaited saddle horse class, (under 15.2 hands). (On Connoisseur, Miss Ruth Casparis won in the ladies' mounts. After winning in the ladies' mount class Connoisseur was immediately purchased by the Merkle stable of Columbus, to add to the long list of prize winners which it now possesses

A new feature of the show which attracted much attention was the ladies' riding contest. Only form and management in the saddle were considered by the judge. Fourteen riders appeared of which Mrs. Sarah Long Brown won first, Miss Jesse Merkle, second; Mrs. O. C. Altmaier, third, and Miss Francis Robbins, fourth.

In the carriage pairs Miss Casparis again displayed her skill in horsemanship winning first with a Mitchell pair, High Jinks and Drum Major, over Highland Lassie and Killarney Rose, driven by Mr. Mitchell.

On Parade, with Harry Brown up, took the silver cup in the three-gaited saddle class listed for horses 15.2 or over. He won over a splendid field for behind him were Sable Denmark, Killarney Rose and Lady of Quality in order named. On Parade later won the championship class over Connoisseur, thus making eight firsts and two championships for him since he came to the stable of Henry W. Brown.

The blue ribbon in the gaited stallion contest went to Eli Montgomery of the White Star Stock Farm; he was followed closely by Mt. Sterling Chief, an entry from Washington, C. H. which J. C. Myers showed with particular style.

The hunter class lacked the style and class of the other events. Four horses entered but none made the bars without ticking. There were two sets of ties, the first premium going to Danny, entered by Lieutenant H. L. King of the Columbus barracks. Genesee, with Bert R. Brown was second.



OPPORTUNITIES FOR THE AGRICULTURAL GRADUATE

AGRICULTURAL ENGINEERING.

The department of agricultural engineering holds that the service which it should render to the state will be performed through four distinct channels: namely, (1) through the student who expects to return to the farm, (2) through the student who expects to engage in mercantile pursuits having to do with the application of engineering to the farm, (3) through the student who expects to engage in teaching work, and, (4) through the man who is already engaged in farming and who would learn how to apply mechanical principles to all his farm life so that his work might be lightened and that his means of real enjoyment in country living might be increased—truly this is a large service if efficiently rendered.

Performance in the first direction will of necessity constitute our chief work. In common with animal husbandry, agronomy, dairying, agricultural chemistry, etc., we have an agricultural engineering department within the college and in this regard must lend our influence in molding the college graduate to a complete and well-rounded form that he may cope with the numerous problems of the farm more easily and efficiently. It is only in recent years that this phase of education for farm life has begun to receive the attention which it deserves. The necessity for such training is becoming more and more acute as the years go by: for, in our process of development, the use of mechanical appliances is rapidly increasing, and as a natural sequence there is a multiplicity of these appliances now available and to choose the right one for the right place is no longer an easy task. We

do not hold it to be our duty to teach the student which make of machine or implement is best, but through a wider familiarity with good and bad features of construction, to render him capable of exercising a discerning judgment.

The implement manufacturer, more directly the implement salesman, exerts a wide influence on the type of modern machines and other mechanical appliances which find use on the farm. Implement companies are employing large numbers of men the year round to serve in the capacity of experts and "trouble" men, assisting farmers in the erection and operation of new machines and in the correction of troubles in the old ones. A great many of these dealers are not satisfied with the type of men which in the past they have been forced to select for this work. Some of the most prominent dealers in this and other states are saying that they should be able to look to our colleges of agriculture for students who are trained in agriculture generally, and in agricultural engineering in particular, to fill positions as experts, which invariably leads to a responsible position as salesman, block manager or branch house manager. Furthermore, a company's foreign representative must be a man of broad educational training who appreciates the field of agriculture in this and other countries.

As soon as the department is supplied with adequate room for equipment which is available free of cost to the university, a course looking to the training of men for this work will be introduced. Such a course would include instruction in experting the various lines of farm machines, salesmanship, contracts, etc. There is an undoubted demand for such a course.

Departments of agricultural engineering all over the country are enjoying a steady growth, making necessary the employment of many new teachers each year. Moreover, departments are dividing and sub-dividing the work, which calls for specialists along various lines. The teacher of agricultural engineering must never forget that he is teaching agriculture and not engineering. Nevertheless, to teach this phase of agriculture successfully, he must have rather complete training in engineering in addition to his training in agriculture. Consequently, this department can only aid in the training of teachers, for in addition to the work which we give, all who expect to teach this subject must include in their courses a large amount of engineering work, particularly physics and mathematics. While this phase of the work does not call for a large number of men each year, those who are especially qualified for such positions are correspondingly scarce.

Extension work in agricultural engineering is just beginning its development and here in Ohio offers an unusually large field for service. We hope to be able, through our extension representatives, to carry to the farmer's door not only theoretical instruction on, but practical demonstrations of the modern improvements about the home and farm which it is possible for the farmer and the farmer's wife to enjoy.

H. C. Ramsower.



THE ANIMAL HUSBANDMAN'S OPPORTUNITY.

One cannot emphasize too strongly the need of stockmen on Ohio farms, and the great opportunity for future

usefulness on these farms where animals are to be bred and fed. Only a small per cent of our stockmen are real students of breeding and feeding problems. We are sadly lacking constructive breeders, men who contribute in a significant way to the much needed improvement of all breeds. The college trained man has the opportunity to win distinction and reasonable compensation in the field of animal breeding, such as cannot be secured in most other occupations. If he loves animals, and can have the necessary home support to take up the work after leaving college, then the stock farm should be his first consideration.

During the past fifteen years there have been numerous openings for animal husbandmen in college and experiment station work. Promising young men have started in at good salaries, and in instances have received rapid promotion. The future openings in this field, however, are not likely to be so great as in the past, because the colleges are educating a large number of men, thus supplying the need in much greater degree. No doubt, however, a very limited number of promising men will have opportunity in the future as in the past. This is an attractive field, working with the view of service, with the thought of helping the student in the school or the stockman in the stables, as the case may be. Different colleges pay different salaries, and new graduates begin at various sums, with \$1,000 a year the initial price paid for the better class men at many institutions. The pay varies, however, with the work to do, the experience of the teacher, the character of the department, its income, etc. Many animal husbandmen receive salaries from \$1500 to \$1800 a year, and the number rapidly decreases as we

pass beyond the \$2000 point. Men of signal ability, however, may reasonably expect to pass much beyond this, provided they become gifted teachers, able investigators or resourceful administrators.

The field of live stock journalism each year absorbs a small number of graduates. These must be real stockmen, with the ability to express themselves in print with terse, comprehensive, accurate, readable style. Such men may have great influence and be of large service and they may also draw large salaries. Agricultural journalism is a profession that should draw into the editorial room the very best talent.

Our great agricultural department at Washington takes each year a large number of young men who do field work of different kinds, and who develop in the department along certain lines. One may be a specialist in almost any branch of live stock work and find an opening in the United States Department of Agriculture. Many young men begin in the department on salaries of about \$1,000 a year, but promotion is slow, and increases in salary are not rapid.

A few men interested in live stock find occupation in the stock yards, in packing houses, in the offices of pure bred live stock associations, etc. Some of the most efficient secretaries of live stock associations, notably the American Guernsey Cattle Club, the American Hereford Cattle Breeders' Association and the American Percheron Society, are graduates of agricultural colleges.

There is an opportunity for the stockman to secure a position as manager of a stock farm, but he is not likely to make a success of it until he has played a second part elsewhere for some years, and has become well seasoned. Rarely

does a new graduate succeed in managing a plant for some one else, for his employer expects too much, and the young man falls down. He simply lacks experience and the judgment that comes with time and experience. Personally, I never wish to recommend a new graduate to the position of general manager or superintendent. The risks are too great all around.

In conclusion, it may be said that the field of animal husbandry is a large one and most attractive to the lover of animals. In it one may find reasonable financial reward, as well as a most pleasurable occupation.

C. S. Plumb.



OPPORTUNITIES FOR THE AGRICULTURAL GRADUATE IN DAIRYING.

Dairying offers great opportunities for young men at the present time. Milk being one of the cheapest food products and adaptable to various conditions, more experts are constantly needed to develop the business. In the natural way of thinking, dairying is simply a milking operation, and is looked upon by many people as a drudgery. Since hand milking is fast being replaced by machine milking, a higher class of labor is needed to operate the machine. Therefore, milking becomes less tedious and becomes more interesting from a mechanical standpoint. Moreover, there are great possibilities of developing this machine.

Breeding for higher production is a factor that is fast coming to the front, and there are two classes of this work. First, for grade cattle there is the cow testing association or cow improvement association which calls for a man

of experience in testing and feeding operations. Diplomacy in handling the people is also necessary. This gives the man an experience such as he can not get otherwise. This man travels from farm to farm and becomes familiar with the details of the management used by the man who is aggressive and is making profits on his farm. He compares this person with the man who becomes dissatisfied through mismanagement and his unprofitable labor.

Second, there are opportunities for young men to become breeders of pure bred, high producing cattle. There are men in this work who are receiving salaries greater than those of 99 per cent of the college professors. Besides the salaries these men receive a great reputation which is worth something to any man. Breeding of pure bred cattle for high production requires special skill and patience and is rather confining, but it offers unlimited possibilities for profitable labor. A good example of this is Mr. Dollar, who recently died after ten years of pure bred breeding for high production. The result of his labor brought at auction \$150,000. Can anyone ask for more profitable labor?

There are also unlimited opportunities to men who engage in the manufacturing side of this work. Expert butter makers are constantly in demand. Expert cream testers are in just as great demand and at the same time there are the possibilities of purchasing a small plant and starting to operate for oneself. One of our short course dairy students started a small creamery with an investment of \$700. After two years of operation, the banker reports to us that the man has cleared above expenses, \$2,000 this past year. This was done in the face

of competition with four other creamery plants.

The retailing of milk that is wholesome and at all times comes within the regulation of the Board of Health, is another opportunity. There are many cities in the state of Ohio, ranging from 5,000 inhabitants up, that do not have a decent milk supply. We can cite instances in which men have started in on a small scale and are now receiving a splendid income for their services.

There are opportunities for dairy bacteriologists and chemists in the larger milk plants, with splendid salaries. Efficiency men in these plants are often wanted and the salaries depend upon the schemes of efficiency they can develop. Efficiency men must know how to approach the people and develop the business, at the same time arranging the plant so that the work can be accomplished with the least expense.

Cheese is fast becoming one of the important food products of the nation, on account of the high per cent of protein and the low cost in its production. Cheese sells on the market for 25 cents a pound, and contains practically three times more protein than a pound of meat. Unlimited opportunities to develop a business are offered in this field. Soft cheeses are more profitable than hard cheeses, require greater skill and offer greater opportunities for scientific men.

The manufacture of fermented milk, special butter milk and modified milk likewise offer great opportunities. Milk condensing is one of the big fields for the utilization of surplus milk. Positively the best experts and scientifically trained men are required in this work. Good salaries are usually paid to men who understand their business. The

powdering of milk is a new process which is just being developed, and which offers another field that is and will be very remunerative.

The consumption of ice cream is increasing every year. Demand for good ice cream makers and demands for local plants in cities of moderate size are great. While competition is keen in this line of work, yet with a well managed plant, it is very remunerative. Dairy farm managers are always in demand, and sometimes this work offers the best salaries from large

cream separators, various dairy apparatus, besides the manufacture of special articles from milk as paints and toilet preparations. Thus it is readily seen that there are few vocations that can offer opportunities through the various avenues better than dairying.

Oscar Erf.

THE FIELD OF AGRICULTURAL JOURNALISM.

From the earliest days of journalism we find that the agricultural press has held a very prominent position in shap-



estates of anything that can be secured in any line of work in dairying.

City, state and federal dairy inspectors are always in demand and more cities are developing departments which need well trained men. There are over 6,000 of these positions and more will develop. Experts and dairy advisors for both state and government positions are constantly increasing.

While these positions bear directly on the dairy business, there are, however, a great many opportunities for the manufacture and sale of the so-called dairy adjuncts such as the manufacture and sale of silos, cow stalls,

ing the destinies of our entire communistic population. It has induced the city man in many instances to practice farming on a small scale in his back yard or if he has tried the same business later on a commercial scale, it has been his chief benefactor and teacher. To the farmer himself, it has ever been a source of inspiration, instruction and entertainment.

We find its influence mentioned even before the Civil war, when Horace Greeley said: "The agricultural papers are this day, in my judgment, doing more to promote the true growth of the country and the substantial enduring welfare of our people than Con-

gress, the army and navy." Such was the expression of a man who had no personal interests in the farm press; in truth he was publishing a paper in competition with the agricultural magazines of that day.

But why should we find conditions otherwise than he stated? In all business and professional life we find that each man has a magazine dealing in particular with his line of business. Medical reviews, printers' journals, law magazines and religious papers—each is read by the man personally associated with these distinctive activities. Why then, should we not also see the farmer traveling along the same road with his fellows in business?

As we review the influence of the agricultural press we see a few outstanding features that have made a marked impress upon the farmer's mind. In the first place it may be said that the agricultural press is an incentive to increasing interest in rural life; it keeps alive that love for the country, that longing for nature and nature's peace, that pleasure in working with the truly great things of life. The farmer takes a greater interest in his business; he takes pride in his surroundings, his buildings, his crops, his machinery, his stock, his family, his community and his state. A quiet, welcome visitor, a loyal, instructive friend is his farm magazine.

All this comes through one primary influence of the farm press; namely, increased productive capacity of the farm and consequently increased wealth of the farmer. The agricultural paper is the one great means for the dissemination of knowledge concerning the soil, crops, live stock, farm management and other phases of rural economics. At the same time it is an outlet for the views of the farmer, a

means for discussion with other men upon the subjects in which each is vitally interested. Advertisers and prospective buyers are brought together with the farm paper as a "middleman." Better farming methods and better returns are a direct result. Then indirectly come the resulting better homes and better communities. It is a prime essential that improved rural conditions come only through improved farms and methods of management as a forerunner. Hence, we may say that the farm press results in a more profitable agriculture through improved methods directly and through improved communities as an indirect result, and at the same time keeps alive the spirit of a rural occupation.

That the farm press is fulfilling its purpose is evidenced by the testimony of the farmers themselves. A recent investigation of the United States Department of Agriculture discloses the fact that from a census taken among many farmers scattered over various states 71 per cent declared the most benefit they received along the lines of agricultural education came from the farm papers. The number favoring bulletins was 11.8 per cent, farmers' institutes 6.6 per cent, county bureaus, demonstration work and farm advisors 1.2 per cent. Thus we see that the advantages above named are true and recognized in every day life. That a wide field for service is still open no one will deny, and upon future editors rests a great burden for still further education along the lines of agricultural journalism.

The editor of the farm paper must always remember that he has a lofty mission—that in many cases he reaches the very heart of the homestead; that he is directing the minds of far more than he may ever expect to see. He

must be a person well versed in every field of agriculture and its kindred subjects.

We find that the field of agricultural journalism, however, does not include merely the farm papers; we see men in many activities who may be said to come in the same realm. It is a field we may say almost as wide as the world and as full of hidden possibilities. We see men editing papers or bulletins; others are directors of agricultural extension departments and publish news letters, farm bulletins, and press material. While there is much to be done along this line, yet by far the greatest field is the farm paper itself, and here in the possibilities of the trained graduate from the agricultural college seem almost unlimited.

L. L. Rummell.



THE FIELD OF HORTICULTURE.

The rapid increase in population demands an increasing supply of horticulture products, consequently an overproduction of staple articles is little to be feared. In any event there are not many states that have climate, soil and transportation facilities equal to ours. There is room and need for all sons of Ohio within the state and the farms offer opportunities that should not be overlooked.

We recently had the pleasure of making an inspection trip with a party of students to the counties of Lawrence and Washington. Orchards are grown on rich bottom lands as well as upon hills, the trees apparently doing well in either location. Here is a large section that has made a specialty of fruit growing and the orchard owners are prosperous. But little complaint was

heard about the low prices that prevailed last season and all concerned are preparing with confidence for this season's crop.

In the vicinity of Marietta, vegetables have become the main crop with many farmers. Here garden farming has been developed to a greater extent than in any other section of the state. The fertile bottom lands of the Ohio and Muskingum have been divided into many comparatively small sized farms valued at \$800 to \$1,000 per acre. The highly cultivated fields together with numerous comfortable homes gives one an impression of prosperity that is unusual in country districts.

The future of orcharding may appear to some people as depressing when judged by the low prices of last year. However, it must be conceded that the marketing conditions were exceptional and should not be expected to continue. Then too, statistics show that orchard planting is not keeping pace with the number of trees that are dying and in the meantime population is growing at an enormous rate. It is no wonder then that the fruit growers of Ohio are confident of the future. Vegetables are a staple product and are used in greater proportion as meat advances in price. There can, therefore, be no question in regard to the future of the business in general.

Space will permit only the mention of the many other phases of horticulture, such as the greenhouse industry, seed growing and the growing of nursery stock. All these industries are highly developed in this state and all offer advantages to the man who is adapted to the work.

The professional phases of horticulture offer attractive inducements to well trained men. The teacher and the investigator occupy fascinating fields,

while the new course in landscape architecture opens up a profession that has received but scant attention as yet in this section.

W. Paddock.



OUTLOOK FOR THE STUDENT IN AGRONOMY.

There are certain lines of work in the field of agriculture today to which a thorough knowledge of what is being taught in agronomy will lead. Each of these fields requires considerable work in the university in other departments. Should a student see unusual opportunity for himself in any one of these fields, judgment must be used in selecting courses that would fit in best for future requirements. These fields can be more readily comprehended if enumerated with some suggestive explanation.

1. Investigating Work—This field in crops is almost unlimited. Our knowledge of crops so far as scientific data is concerned is only in a pioneer stage. Every day the crops man is finding statements regarding practices and results with no authentic data to prove them. For investigational work in crops the specialist needs to be an exceptionally well trained scientist. Chemistry, botany, bacteriology, plant pathology, genetics, each play a great part in this work.

2. Government work—This includes in part the work mentioned above but also includes other investigators such as grain market experts, crop reporters, county agents and those who are concerned with foreign plant introduction besides a number of other positions connected with the United States Bureau of Plant Industry. Each of

these several lines of government work requires somewhat different training but each also requires a thorough understanding of the various phases of crops work.

3. Farm Management — In actual management of large farms for corporations or individuals, in the management of one's own farm, and in investigational work in farm management operations of any sort the work in crops holds a large part. Here, however, a knowledge of all phases of crop work would be considered essential. A combination of this work with rural economics and other general agricultural courses would be required.

4. Educational Institutions — In teaching in the rural schools especially in the agricultural high schools, there is no work that will attract as much attention as the work in crops. Preparation to fill positions of this kind means as thorough a training in crops as a good general course will allow.

5. Crop Production and Improvement—The greatest opportunity for the crops expert is found at home on his own farm. The agricultural student cannot be urged too much to go home and apply what he gets at college. Here again the general course is best; but the young farmer who knows how to produce the best crops, how to prepare the soil best to produce the greatest crops, how to improve his seed by selection or crossing, how to produce better seed than any of his neighbors, has made a long stride toward success.

There are opportunities in all lines of work for the man who knows. A specialist in any line gets best results if he likes his work. So in making a choice in agronomy one can best be led by his own desires.

F. W. Stemple.

OPPORTUNITIES IN AGRICULTURAL CHEMISTRY.

Many of the lines of work that make up the subject of agriculture have to do with the growth of plants or animals or other processes that involve chemical changes. In all these lines the co-operation of the chemist is necessary in order that such a complete knowledge may be obtained as will allow of rational improvement in methods.

The soil, naturally, is the object of primary interest in agriculture. Many of the changes taking place in the soil are chemical, and are concerned in the preparation of available plant food, or in the formation of substances injurious to plants. Some of these processes are known, but many remain to be investigated and a thorough understanding of them is necessary in order that the best cultural methods may be developed.

Plant growth is largely a series of chemical changes, and chemical factors greatly influence the rate of growth, and the quantity and quality of the product. The study of these changes and factors, as yet only imperfectly known, is one of the most interesting and useful fields of applied chemistry.

The change of plant substances into animal bodies is also largely chemical. Much work has been done on the chemistry of animal nutrition, and many important facts have been learned, but very much remains to be done before the knowledge of this subject is at all complete.

Agriculture, however, does not stop with the production of plants and animals. These must be changed into food for man, or other materials that he can use. This is another great field of work in which the chemist has his place. It is quite largely a knowledge

of chemistry that has changed the rule of thumb methods of manufacture of a few decades ago to the far more exact methods of the present day.

The dairyman, the miller, the manufacturer of corn products and many other producers of finished goods are greatly aided in their work by the chemist.

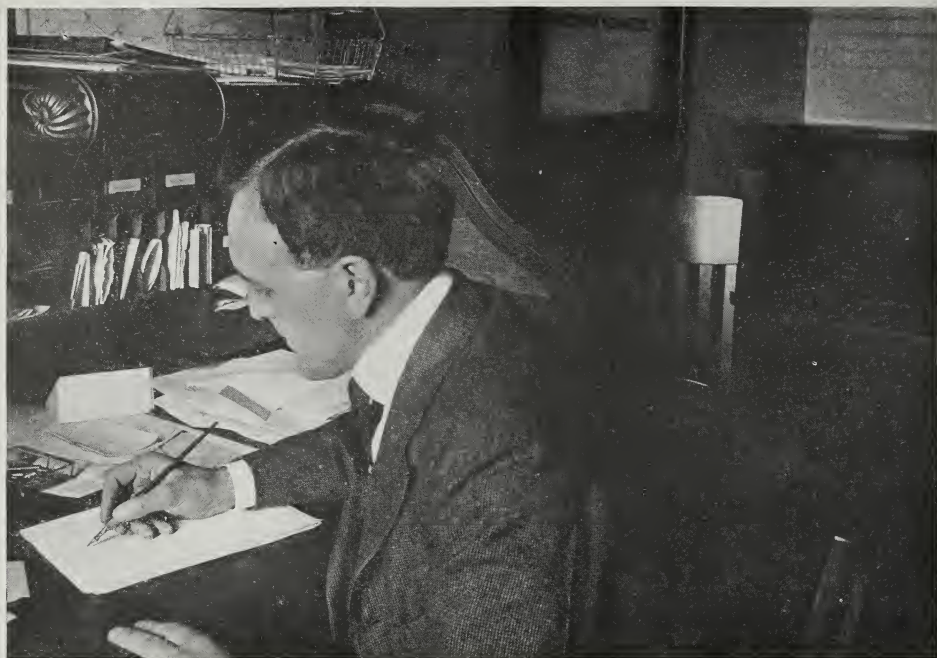
Another important office of the chemist is the protection of the people against fraudulent manufacturers of foods, feeding stuffs, fertilizers, insecticides, etc. The great improvement in recent years in the quality of these substances offered for sale has shown the value of this control work.

As a teacher the chemist also has a wide field of usefulness. His opportunities are two-fold. He has in charge the training of the few who will continue in one of the lines of work that have been mentioned, and the teaching of a far greater number, who as a result of his efforts will be able in a practical way to apply the facts learned by his investigations.

The work along these lines is by no means limited to the departments that are called chemical. Many of the leaders in animal nutrition, plant physiology, dairying and other lines have a chemical training. Such a training, due to the exactness of thought developed, and the broad view of agriculture obtained has helped greatly in the fitting of many men for positions as presidents and deans of colleges, and directors of experiment stations.

Agricultural chemistry perhaps does not offer as great financial opportunities as a business life, but to those who love to find out things, to look into the processes of nature, and who wish their work to be of use to the world few lines of work are more inviting.

Thomas G. Phillips.



A Tribute.

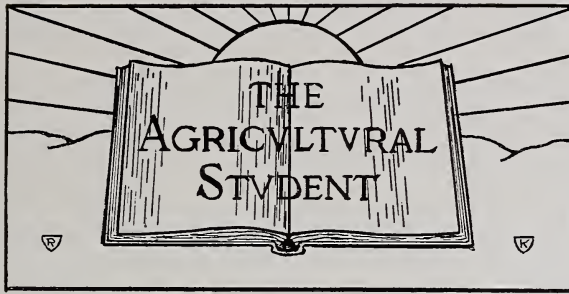
As the school year draws to a close so terminate the services of one of the most highly esteemed of our friends and professors, Homer C. Price, Dean of the college of agriculture. The opening of the next school year may see a new head who will direct the destinies of the greatest college of this great state university, or at least the reins will rest in the hands of one other than him who has been its leader for the past twelve years.

Whatever may be the cause for the Board of Trustees asking for the resignation of Dean Price, he leaves with a commendable record behind him. During his time as dean of the college the enrollment has increased five fold, the instructional force has likewise been augmented, new courses of study have been added and the equipment has been greatly enhanced.

But by no means has the influence

of the college been confined to the campus. Thousands of farmers over the state have received practical training under its supervision; schools have become dependent upon it for material in their teachings. County agricultural work and junior contests have received an impetus, and farmers' institutes have prospered in co-operation with the college of agriculture. Harmony has existed at all times between the college and the state and national organizations. Remarkable, influential and praiseworthy have been these activities and far-reaching have been their effects.

In the promulgation of this work Dean Price has played a leading part and credit is due him for his work. Sincerity, thoroughness and consistency have been his watchwords. May we in this small way express the appreciation and the credit that is due the man — The Editor.



OF
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COLUMBUS, OHIO, JUNE, 1915.

EDITORIAL

With this issue the Agricultural Student completes the twenty-first volume of its publication. During the past year we have endeavored to carry out a few policies and to bring before our readers articles of interest concerning every phase of agriculture. Composition, design and illustrative material have received greater consideration than in any previous volume. But to our readers we leave the privilege of judging the results of our efforts.

That much labor has been expended in the publication of this magazine no one will doubt. No college credit or financial return is given the management, but to these men there is still

the greater reward that comes through responsibility, necessity of initiative, practical experience in business and the association with men. Far greater is the reward to such a person than that which comes to the average student in college.

As we lay down our editorial pen, we do so with reluctance and yet at the same time with hopes for a still greater magazine which is representative of the Ohio College of Agriculture. To the new editor, Clarence M. Baker, and to the new business manager, Evan T. Davies, we look forward to the realization of our hopes and wish that the future will be given to the service of agriculture and the state.

Following closely the teachings of the college, seventy-five per cent of the students graduating in

OUR four-year course in
GRADUATES agriculture this year will take up farm operations on their home farms or will be engaged in farming on a commercial basis for others immediately after commencement. Of the remaining 25 per cent, probably 10 per cent will take up the teaching of agriculture and 5 per cent will take up graduate work; county Y. M. C. A. work, government service and professional lines will constitute the vocations of the remainder.

In commenting on the fact that many of the students will immediately engage in farming, many people are apt to regard "going back to the farm" as unusual or not in accordance with the general attitude of the college graduate. To them the phrase, "back to the soil," carries with it a feeling that the college graduate could find nothing else to do. However, it should be remembered that the college boys are going to the farm because in their opinion it is the best thing to do. It is a personal preference rather than a forced choice. There is no nobler occupation than that of tilling the soil. The satisfaction that comes from profitable production cannot be compared with the work of the office man, the traveling man or the merchant. It is far more lofty, a more worthy and a more ideal life.



During the past year we have seen a number of shows given under the auspices of the various student societies pertaining in particular to that work closely associated with each respective organization. The agricultural college is par-

ticularly suited to such activity because of the diversification of interests it presents.

First of all we saw the Apple Show given by the horticultural students to bring before the other college men and the people of Columbus the possibilities of Ohio in respect to her orchards. Soon followed the Grain Show which proclaimed the wealth of Ohio's soils and the ability of her farmers as evidenced by the field crops. Last of all came the crowning event of the year—the climax of Ohio State exhibits—the Horse Show given by the students in animal husbandry. Here was an example of great business ingenuity, tact and successful management displayed by student heads.

as we review these larger shows, noting their character and scope of work, we are impressed with the benefit they afford to the students under whose guidance they are given. Truly they are as great an undertaking as similar exhibits at many of our agricultural fairs. The skill and ability of the men who have managed them command our admiration and praise.

Those who are prone to criticize our agricultural education as impractical cannot do so in the face of this evidence to the contrary. It is true our colleges cannot combine theory and practice in everything they propose to teach but in every possible case the two go hand in hand and here we see this fact exemplified.

The one regret that comes with this statement of praise is that more students are not identified with this line of activity. The advantages are confined to the comparatively few and upon them rests in many instances more than should be exacted. Hence, we urge the successors of these managers to increase interest in all the Ohio

State Shows and make them still greater as the years go by.

¶ ¶ ¶ ¶

With the close of the school year, the students in the college of agriculture will lose two of their

FACULTY CHANGES. most intimate and influential professors, George

Livingston and Gilbert Gusler. Prof. Livingston, who has been acting head of the agronomy department, will take up the study of grain marketing for the U. S. department of Agriculture; Prof. Gusler will become associated with the animal husbandry department of the University of Illinois.

Both of these professors are comparatively recent graduates of Ohio State University and have been closely associated with the promotion of student activities in the college of agriculture. Prof. Livingston has always given his support in making the annual grain exhibit one of the best educational features in the role of student shows. To Prof. Gusler belongs the honor that accrued from the coaching of the dairy team which won first rank at the National Dairy Show last October and at the same time establishing a record that no other team has secured since the beginning of the contests.

It is certain that the loss of these professors will be keenly felt in the student circles. Their intimate association with the students, their knowledge of the wants and needs of the agricultural students in Ohio and their willingness to further student affairs have made their services invaluable to

the college. With such changes the broad constructive policy of the college can never be hastened or brought to a higher plane as long as Ohio's greatest institution continues to allow her material to be taken by other universities.

¶ ¶ ¶ ¶

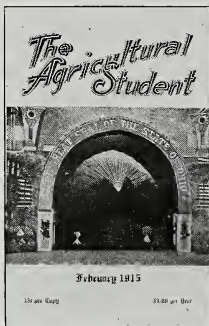
With the presentation of this number, we extend our appreciation to the members of the

ACKNOWLEDGEMENTS.

faculty and heads of the student organizations who have so generously responded to our requests for contributions. To the Makio we are indebted for the numerous illustrations which are particularly adapted for the final number of the year.

In general we also extend our thanks to all those who have helped in various ways with the work of The Student during the past year; especially to all the departments in the college which have given freely of their time and efforts whenever they have been called upon to do so. In the preparation of special numbers their advice and suggestions have been invaluable. To our fellow-students we have always been indebted for their interest and support in extending the scope and influence of the publication.

We trust that the same good feeling shall continue to exist between the members of the staff, the students in the college, and, that the advancement of the The Student shall be brought about by a broader co-operation of all that we might mention.



The Agricultural Society.

In accordance with the purpose of all organizations which have to do with the extension of student activities, the Agricultural Society is doing its part in providing suitable educational features which must necessarily come along with class room work. Aside from the publication of *The Agricultural Student*, the principal function of the organization, the society provides for a number of features which are of general interest to all the students in the agricultural college.

The special fields of agricultural activities are covered by a number of technical organizations. Hence the society feels that it must take up only general topics. During the past year, the society has given a number of lectures dealing with topics relating to

the work of county agents, agricultural extension, county Y. M. C. A. organizations, commercialized industries relating to the advance of agriculture, the work of the state departments, etc.

With the beginning of next year, a plan has been devised by the management which will be put in operation. A special list of speakers secured from other colleges and experiment stations will be arranged to appear monthly. The list will probably also include men at the head of nation-wide organizations and industries so that a broad field of instruction will be afforded. If possible the speakers will be secured and booked several months ahead but none will be scheduled during Farmers' Week although some may be listed during the winter course in agriculture.

R. A. Hammond, Pres.

NEW STAFF, 1915-1916.

Editor-in-Chief—C. M. BAKER.

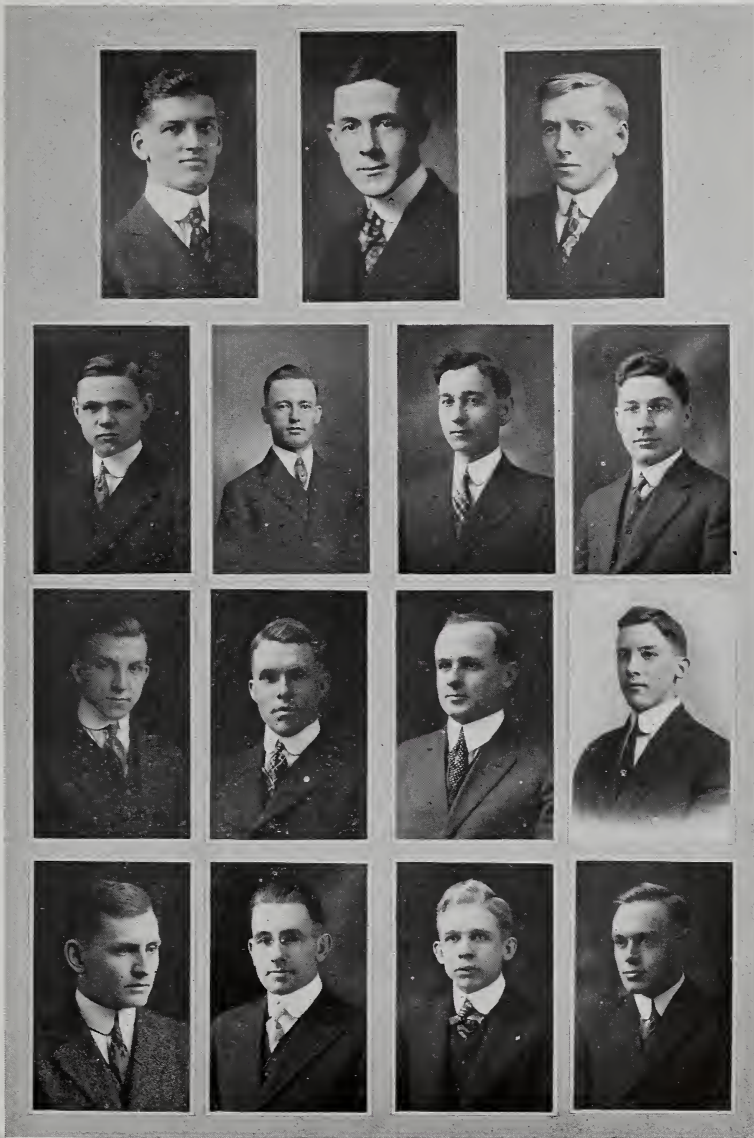
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MELL, WILLIAMS, R. WYLIE.

The Saddle and Sirloin Club.

Following closely upon its purpose, "to further the interests in animal husbandry among the students of Ohio State University," the Saddle and Sirloin Club has proved itself to be one of the most efficient organizations of its kind for the advancement of student activities in the college.

Aside from the monthly meetings at which some feature of animal husbandry is demonstrated or displayed, the club annually stages the "Young International" and the Ohio State Horse Show. These features are in no wise limited to the students who are specializing in animal husbandry but are of general interest to the public. On one occasion a butcher from the North Market gave a practical demonstration in meat cutting which was attended principally by home economics students and men at the Farmers' Institute Normal.

The Young International consists of

a display of the university live stock which is sent to the International Live Stock Exposition; other added features are horse trimming, judging demonstrations and the like. Next year a stock judging contest will be planned which will be open to all students in the agricultural college. Liberal prizes will be given in this competitive event.

The climax of the activities of the club is the staging of the annual Ohio State Horse Show, which is held on the campus in the University hollow. The proceeds of the show go toward financing the stock judging teams.

The purpose of the club is educational in every degree and it has contributed in no small extent to the great educational programme of the university. It is hoped that the club will continue ever to extend its policies and make itself still more efficient in the promotion of animal husbandry interests over the state as well as in the university.

R. L. George, Pres.



DAIRY TEAM—NATIONAL DAIRY SHOW, 1914.

GILBERT GUSLER, Coach.

C. E. WYLIE

L. L. RUMMELL

R. WYLIE

Sweepstakes Team, highest individual judging all breeds, highest individual judging Jerseys, highest individual judging Guernseys, highest team judging Jerseys. Winnings—\$1,200 in scholarships, three silver cups and two gold medals.



KRAUSE, DAVIES, LUTZ, GUARD, CRIM, CROSS, M'COMB.

JONES, ELLIOTT, HENDRIX, BERRY, STUTZ, HAMMOND, GEORGE.

BEERBOWER, OVERHOLT, BAKER, L. M. EVANS, CHRISTEN, D. P. EVANS, DIKE.
STEELE, RUMMELL, BISHOP, KING, PHILLIPS, COPELAND, JACKSON, CONNAROE.

Townshend Literary Society.

Ever since the early days of the college of agriculture, Townshend Literary Society has received the loyal support of many of the students. At one time nearly every student in the college was a member but a limitation in the membership was necessary so that each member might have an opportunity to take part in the weekly program at least twice each semester.

This organization has for its object the development of literary talent among the agricultural students and

judging from the number of influential graduates of the college that have been members of the society, its purpose is being accomplished. This year for the first time Townshend had a representative on the varsity debating team. Fifteen students graduating this year representing the leaders in every branch of activities in the college are members of the society. With a goodly number of old members returning next year Townshend Literary Society will undoubtedly enjoy its most prosperous year.

D. P. Evans, Pres.



ALBING, KENNEDY, PORTER, KNOLL, NAUTS, FOOTE, LEONARD, LAWTON,
PRICE, JEFFREY, STONER, M'PHERSON, CROUCH.
GAISER, WIESENBERGER, LUTZ, ABEL, DEIBEL, LOUGHRY, PHILLIPS, BLISS, HIG-
LEY, LEWIS, SLUTES, ROTHACKER.
CLAYTON, CROSS, OCHS, PENTON, HAPGOOD, PIERCE, TONG, BAIRD, GLINES,
CLARK, HEJNA, SALLEE, STONE.
SCHMITT, REISLING, KIEFER, KROUT, DENISON, FOSTER, GRISWOLD, WILTBER-
GER, POULSON, SMITH, HARKINS, KETTE, MOSIER.
GROW, BURKHOLDER, MARPLE, DAWSON, RUNYAN, PROF. MONTGOMERY, EL-
LENWOOD, MISS PERRIN, LEYDA, DRAIN. PROF. PADDOCK, COPPER, KINKEL.

The Horticultural Society.

Organized eight years ago, the Horticultural Society has continued to be the official organization in which the students in the horticultural department have had opportunity to develop the interests of their profession at Ohio State University as well as in the state in general.

Beginning with the opening of the school year, every student in the department is urged to select and store away samples of fruit which are to be exhibited in the annual Apple Show, held in December. This year premiums in cash and merchandise amounting to \$380 were distributed among the students in the college. Special prizes were given to the winners of the judging contests which are held at this time. Besides financing the show, enough money was secured to send out a judging team, the first in the history of the college.

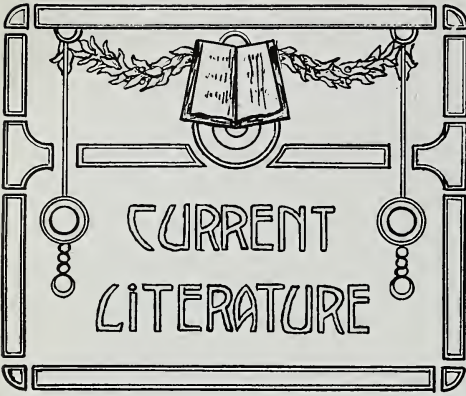
Undoubtedly the most important activity which the society has started is

that of the John Chapman Memorial Association, a state organization for the memory of the pioneer horticulturist, "Johnny Appleseed." With the co-operation of prominent people over the state it is planned to erect a suitable memorial at his grave at Ft. Wayne, Ind.

During the school year the society holds regular meetings every two weeks at which professors in the department or men interested in horticulture speak. Frequently these talks are illustrated with lantern slides showing nursery scenes, orchards, marketing facilities, inspection work, etc. All members of the society are required to report frequently on some original work.

In this manner the Horticultural Society has been built up until it has become a permanent factor in the development of horticultural interest; at the same time it affords a means by which the students can become more thoroughly acquainted with their profession.

C. L. Burkholder, Presi.



“Nature Study and Life,” by C. F. Hodge, Assistant Professor of Neurology in Clark University, Worcester, Mass., is a clear presentation of the subject of our common plants and animals. Elementary botany and forestry, small animals, insects, birds and management of small gardens are included in the text. It is especially adapted to schools and teachers. 514 pages, illustrated. Cloth \$1.50. Ginn and Company, Boston.

“Commercial Raw Materials,” is a treatise written by C. R. Toothaker, Curator of Philadelphia Museums, which describes all the important materials that enter into the commerce of the world. The substances are traced from the sources in the animal, vegetable and mineral kingdoms to their final uses. Cotton, sugar, woods, rubber, silk, iron and coal receive the greatest attention. 108 pages with charts. Net \$1.25. Ginn and Co., Boston.

“Bacteria, Yeasts and Molds in the Home,” by H. W. Conn, is a simple comprehensive treatise of this subject adapted to the needs of the ordinary person as well as the student of domestic science. The economic relation of these plant forms in the home are presented in concise, complete style.

Prevention of disease is one of the main considerations. 293 pages, illustrated. Net, \$1.00. Ginn and Company, Boston.

“Practical Dairy Bacteriology,” by H. W. Conn is a treatise designed to meet the constant demand for dairymen experienced in the subject of pure milk production and public health problems. A general statement of bacteria in their relation of dairying is supplemented by 75 experiments designed for the student in the laboratory. Thus the book adapts itself to the dairyman, the student and factory man. 340 pages, illustrated. Cloth, \$1.25. Orange Judd Co., New York.

“Beginnings in Animal Husbandry,” by Prof. C. S. Plumb is a simple and practical treatise of live stock management which is suited to the farmer and the student in the secondary school. The various breeds of stock, practice in judging, selection, pedigrees, breeding, feeding, general management of stock and poultry are dealt with in logical sequence. Many illustrations make the discussion more forceful and complete. 393 pages, cloth, \$1.25. Webb Publishing Co., St. Paul, Minn.

“Soils and Soil Fertility,” by A. R. Whitson and H. L. Walster of the University of Wisconsin, is an introductory study of soils and presents no scientific details. The most simple and practical way to handle the land to produce good crops is the main purpose of the text. The chapters include such subjects as origin of soils, soil analysis, farm manures, physical properties of soils, soil analysis, farm manures, physical properties of soils. 320 pages, illustrated. Net, \$1.25. Webb Publishing Co., St. Paul, Minn.



WHAT THE SENIORS WILL DO NEXT YEAR



L. W. Adam finished his required work at the end of the first semester and is now farming at Ft. Jennings, Ohio.

H. L. Andrew recently passed the civil service examination in state farm management, receiving first rank; he will be engaged in rural survey work during the summer.

Harry Atwood will teach high school agriculture.

Howard Baker will manage the home farm at Buckeye Lake, Ohio.

J. L. Bard will operate his father's farm near Girard, Ohio. Livestock will be his specialty.

J. O. Barkman expects to enter the professional side of dairying.

I. W. Beerbower will assume control of his home farm after June 17.

A. J. Bishop will manage the Pleasant Hill Farm at Delaware, Ohio. Percheron horses will be his specialty.

W. W. Blair will practice general farming on his home farm at Hiram, Ohio.

G. A. Boger will manage his father's farm at Wauseon, Ohio.

H. W. Bower will farm at Creston, Ohio.

Earl Chenault will continue in the crop survey work for the extension department of the university.

B. L. Childs will till the soil on the home farm at West Middletown, Ohio.

Hubert Connaroe will have charge of the county Y. M. C. A. work in Medina county.

C. E. George has been appointed as assistant dairy and creamery inspector by the state board of agriculture; he will have charge of the northwestern district of Ohio.

W. S. Davis will teach agriculture in a secondary school in Michigan. He is also considering a position with the Chinese government for the following year.

C. A. Dawson will be head of the agricultural chemistry department of Ewing Christian College, Allahabad, India after September 1.

C. E. Dike will enter the teaching profession.

F. W. Duffee will take graduate work at Ohio State next year.

D. S. Durnell will enter the law college at Ohio State University next fall.

R. B. Dustman will take graduate work in chemistry at Ohio State next year.

L. E. Earnhart will practice general farming on the home farm at Waynesville, Warren County, Ohio.

K. F. Eichhorn will farm his father's estate at Barnesville, Belmont County.

D. H. Evans will farm a 190 acre farm near Venedocia, Ohio. He expects to work into the seed business.

C. E. Farrison will practice dairying on the home farm at Napoleon, Ohio.

C. J. Fawcett expects to teach animal husbandry.

W. O. Frohring is with the John Wildi Condensery Company, at Claridon, Ohio.

A. H. Gaberel expects to teach high school agriculture.

R. C. Gauch will take graduate work at Ohio State.

A. J. Copeland expects to teach high school agriculture.

F. W. Cowles will engage in field work for Swift & Co., Chicago.

H. P. Curtis expects to enter the teaching profession.

R. C. Goldbach will take up dairy work.

G. F. Goldsmith will take his master's degree in farm management at Cornell next year.

C. M. Hampson will teach high school agriculture.

J. C. Heckler is with the John Wildi Condensery Company at Marysville, Ohio.

B. R. Higley will operate the home farm at Pomeroy, Ohio.

E. R. Hoftyzer expects to enter the journalistic field.

K. N. Hough will practice general farming on the home farm at Waynesville, Warren County, Ohio.

A. F. Huber is farming the home farm at De Graff, Ohio.

W. F. Jackson will manage the home farm at Delaware, Ohio. Angus cattle will be his specialty.

H. F. Johnson will assume control of the home farm at Courtland, Ohio.

A. C. Kennedy expects to enter the teaching profession.

A. C. Kette will take a degree in horticulture at Ohio State next year.

E. A. King will manage the home farm at Vanlue, Ohio.

W. C. Lane will take graduate work at Ohio State next year. He will take special courses in zoology.

F. C. Liles will engage in entomological work at Tennessee Experiment station.

J. V. Lowe has a scholarship in animal husbandry at Ohio State University for next year.

Quincy Main will do survey work for the department of rural economics.

C. E. McAnall is operating the home farm at Mt. Gilead, Ohio.

J. E. Menching will take graduate work in chemistry at Ohio State next year.

L. P. McCann will farm at Junction City, Ohio.

E. G. McCoy will operate the home farm at Washington C. H., Ohio.

W. E. Meeker has a position with Swift & Company, Chicago.

E. G. Millington will take up dairy work near Cleveland, Ohio.

A. H. Moss will farm at Westerville, Ohio.

F. N. Pattengall will manage his father's farm at Bristolville, Ohio.

G. W. Peters will engage in dairy work.

S. W. Phillips will take graduate work in agricultural engineering at Ohio State next year.

Stanley Porter will teach high school agriculture.

D. L. Price will develop orcharding on the home farm at Urichsville, Ohio.

G. O. Reed will manage the home farm at Findlay, Ohio.

J. H. Rinehart will take up entomology work.

H. G. Rice will take up the teaching of agriculture.

L. A. Richardson is a county agent in West Virginia.

G. G. Roberts will farm 250 acres near Findlay, Ohio.

R. A. Routsong is farming near Dayton, Ohio.

J. B. Royan expects to take work in the arts college next year.

L. L. Rummell has accepted a scholarship in dairy husbandry at the University of Missouri, where he will receive his M. A. degree next year. He will also use the scholarship awarded him by the American Jersey Cattle Club at the National Dairy Show last October.

F. S. Schrock will farm at Westerville, Ohio.

R. E. Shook will farm at Urbana, Ohio.

W. G. Phillips will assume control of the home farm at Cadiz, Ohio. He will practice general farming.

H. U. Simmermacher is teaching at Leroy high school, Leroy, Ohio.

S. B. Sink will enter the teaching field.

O. H. Smith will teach high school agriculture.

Paul Smith is farming at West Unity, Ohio.

R. S. Smith will farm at Westerville, Ohio. Duroc-Jersey hogs will be his specialty.

J. M. Snow will operate a dairy near Cleveland, Ohio.

E. L. Steel will teach high school agriculture.

I. H. Steffy will operate the dairy on his home farm at Hartville, Stark County, Ohio.

H. G. Stevens expects to teach secondary agriculture.

H. O. Stout is teaching agriculture in the high school at Middletown, Ohio.

H. L. Wenner will operate the home farm at Carey, Ohio. Duroc-Jersey hogs will be his specialty.

T. A. Wheeler will return to his home farm at Shaftsbury, Vermont.

E. G. Will will take up experiment station work in chemistry.

D. W. Williams has a scholarship in animal husbandry at the University of Illinois.

A. S. Wing will become a member of the Wing Seed Company, Mechanicsburg, Ohio.

C. E. Wylie expects to take graduate work in dairying at Cornell University and will use the scholarship won by the dairy team at the National Dairy Show.

ENTOMOLOGY.

C. A. Reese will take graduate work at Ohio State.

C. K. Wildermuth will have charge

of entomology work for the United States Department of Agriculture in New Mexico.

P. B. Wiltberger will take graduate work in entomology at Ohio State next year.

FORESTRY.

Collis Jordan will take up commercial lumbering in the southern states.

M. R. Kiser will engage in lumbering in West Virginia.

V. C. Kitchen will take up commercial lumbering in the south.

T. W. McKinley will take up government forestry service in the western states.

HORTICULTURE

C. A. Baird will continue to manage an orchard near Delaware, Ohio.

C. L. Burkholder will take graduate work in a western university next year.

Fred Dennison will engage in commercial orcharding.

W. W. Ellenwood will take up professional work in horticulture.

L. P. Foster will continue to manage the home orchard near Ironton, Ohio.

A. S. Keifer will take up commercial orchard work.

W. S. Kraut will continue his work in plant pathology in an eastern university.

George McPherson will engage in gardening near Cleveland, Ohio.

W. F. Owrey will operate the home orchard at Ironton, Lawrence County, Ohio.

C. R. Runyan will be a student assistant in horticulture at Ohio State next year.

R. L. Schmitt will take up commercial orcharding.

C. O. Siebenthaler will operate his father's nursery near Dayton, Ohio.

W. W. Smith will engage in commercial orcharding.



Bedford limestone will grace the exterior of the first story of the new Home Economics Building which is to be located just south of the Horticulture and Forestry Building. The two upper stories will be made of brick, the renaissance style of architecture being characteristic throughout.

In plan the building is a letter E with 182 feet frontage and 136 feet wings which thus affords a ground area of approximately 18,000 square feet. The north wing provides for a lecture room, four food laboratories, dining room and store room on the first floor; a lecture room, four dietetic laboratories, dining room and supply room on the second floor; and seminar, serving and large dining room on the third floor.

The first floor of the center wing will be given to a large homemakers' laboratory for all short course work and will be headquarters for extension work. Auditoriums to accommodate 500 people will be found on the second and third floors.

The south wing will provide for a lecture room, textile laboratory, three dress laboratories and two fitting rooms on the first floor. A model apartment consisting of a kitchen, dining room, living room, two bed rooms, bath and laundry will be found on the third floor.

The main frontage part of the building is designed for offices, class rooms and a museum on the first and second floors

while the third floor will have a seminar, reading, home nursing and emergency rooms.

The building is to be of fireproof construction and will be ventilated with washed, humidified and tempered air. Room temperature will be controlled automatically. All artificial illumination will be electric, semi-direct type in order to relieve the student of any eye strain.

J. N. Bradford.

Professor George Livingston, acting head of the agronomy department has resigned as associate professor of agronomy to accept a position in the United States Department of Agriculture as a specialist in grain marketing. He will begin his duties on July 1 with headquarters at Washington, D. C.

Professor Livingston has been closely associated with Ohio State University since his graduation in 1909. For several years he was in the field crop service of the extension department and since then has been an instructor and professor in the agronomy department. In 1913 Professor Livingston was given leave of absence to study field crops at Cornell and Halle-Wittenberg, Germany, universities. "Field Crop Production," a college text book, one of the Rural Text Book Series written by Prof. Livingston, appeared April 1, 1914.

Lessons for correspondence courses in agriculture which will be offered by the extension department next September are being completed by different departments in the college. Each department will offer a course in its respective line of work consisting of about twenty lessons. It will be possible for a student enrolling in the course to take all the lessons offered by all of the departments but no set of lessons will be sent to the student until one is completed.

Three thousand boys have signed up for the county livestock judging contests which will be held by the extension department at county fairs this fall. Bulletins on stock judging with lists of questions about different kinds of livestock are sent to all contestants; the answers to the questions must be sent in to the department as a preliminary to the contests.

Last year 25 contests were held with a total of 700 boys entered. This year 40 will be held.

To secure data concerning the management and business side of farming the department of rural economics will conduct a survey in the counties of Portage, Mahoning, Trumbull and Geauga during the summer months.

According to the plan one community in each county will be thoroughly covered; probably as many as 100 farms will be visited and all methods of farming considered with reference to the most profitable systems. From the list of 100 farms 25 will be picked which have proved to be the best managed and these will be studied further to determine the reasons for their efficiency. Actual farm records will be secured in making this survey.

This work is done in co-operation

with the United States Department of Agriculture and the county agriculturists in the counties above mentioned.

Jean Armour 3d 32219 has finished a year's official test for advanced registry and holds the Ayrshire World Championship in both milk and butter fat for a two year old. Her year's test ended March 17, 1915, with the official record of 14,991 pounds of milk, 559.91 pounds of fat and 4 per cent fat. She is owned by W. P. Schauck, Avon, N. Y.

Prof. Paul Vogt of the department of economics of Miami University has been selected by the trustees of the university to succeed Dean H. C. Price as head of the rural economics department. Prof. Vogt has taught in the summer sessions of the university and has made an exhaustive study of rural conditions in Ohio. He will assume his duties July 1.

Gilbert Gusler, assistant professor in the animal husbandry department will leave at the close of the school year to accept a position in the animal husbandry department of Illinois University. Since he was graduated from Ohio State University in 1912 he has been associated with the department of animal husbandry having charge of the dairy judging teams for the past two years. Last year the dairy team won first honors in competition with sixteen other different colleges at the National Dairy Show held at Chicago in October.

C. S. Wheeler of the extension department who recently returned from San Francisco where he had charge of Ohio's exhibit at the Panama Pacific Exposition reports that Ohio's display of products drew considerable comment.

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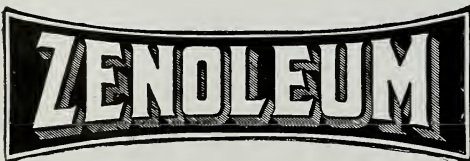
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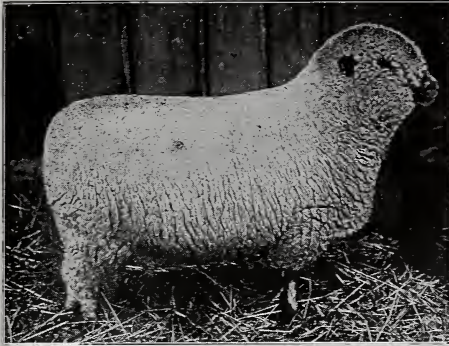
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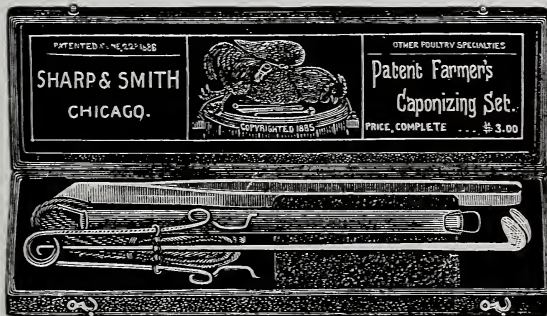
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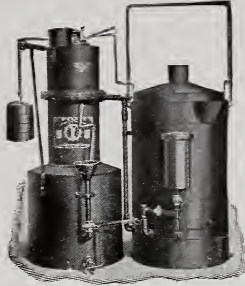
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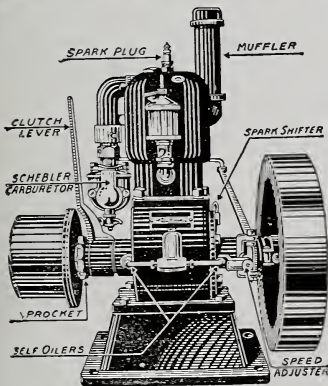
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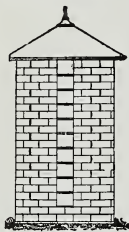
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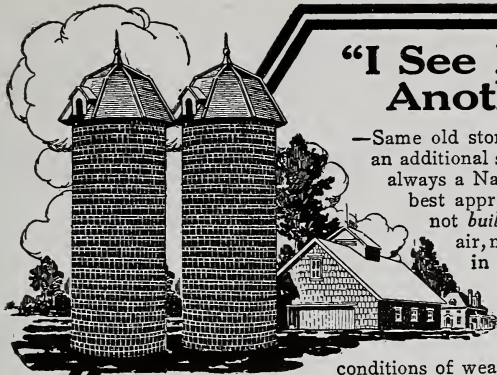
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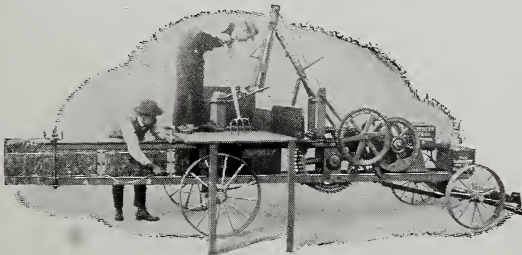
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